



# Minuwangoda Education Zone

Second Term Test - 2023

Grade 8

Science

Time : 2 hours

## Part 1

• Answer all the questions.

• Underline the most suitable answer.

(1) The turning of a solid into vapor without passing through the liquid state is known as,

- (i) Sublimation (iii) Condensation  
(ii) Fusion (iv) Freezing

(2) The voltage of a vehicle battery is,

- (i) 3 V (ii) 12 V (iii) 9 V (iv) 1.5 V

(3) The function of cerebellum is,

- (i) Regulation of body balance  
(ii) Controls higher brain functions such as thought, intelligence  
(iii) Controls heart beat  
(iv) Recognition of senses

(4) The group of that belongs highest number of animals is,

- (i) Mollusca  
(ii) Mammalia  
(iii) Arthropoda  
(iv) Aves

(5) It is used muscular fort for locomotion.

- (i) leech (iii) snail  
(ii) star fish (iv) prawn

(6) Not a magnetic substance is,

- (i) steel (ii) Iron (iii) Ferrite (iv) Copper

(7) Electromagnets are not used in,

- (i) Electric fan (iii) Electric bell  
(ii) Washing machine (iv) Diode

(8) If 100 vibrations are occurred in two seconds the frequency is,

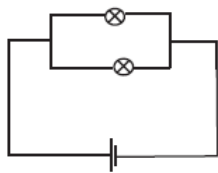
- (i) 50 Hz (ii) 100 Hz (iii) 200 Hz (iv) 2 Hz

- (9) A disease caused to man by virus is,  
 (i) Leishmaniasis (iii) Leprosy  
 (ii) Polio (iv) Typhoid
- (10) When the food is refrigerated the microbial activity is minimized due to,  
 (i) The amount of moisture and temperature are controlled in a refrigerator.  
 (ii) The amount of moisture and  $pH$  value are controlled in a refrigerator.  
 (iii) The temperature and  $pH$  value are controlled in a refrigerator.  
 (iv) The substrate and  $pH$  value are controlled in a refrigerator.
- (11) The largest organ of the human body is,  
 (i) skin (ii) Liver (iii) Epidermis (iv) Kidney
- (12) The yellow colour solid element in laboratory.  
 (i) zinc (ii) silver (iii) sulphur (iv) copper
- (13) The incorrect statement about law of conservation of mass is,  
 (i) The total mass of reactants is equal to the total mass of the products.  
 (ii) During chemical reactions the total mass does not change.  
 (iii) The experiments related to law of conservation of mass should be conducted in a closed system.  
 (iv) The experiments related to law of conservation of mass should be conducted in an open system
- (14) Plants that adapted to store water in the leaves are,  
 (i) Akkapana, Aloe (iii) Aloe, Cactus  
 (ii) Akkapana, Cactus (iv) Begonia, Aloe
- (15) The incorrect statement is,  
 (i) When the resistance of a conductor increases the current flowing through it decreases.  
 (ii) When the resistance of a conductor increases the current flowing through it increases.  
 (iii) Milliammeter can be used to measure a very small amount of current.  
 (iv) There is a definite direction for the flow of electric current.
- (16) The plant with the given leaf arrangement is,  
 (i) Rukkaththana  
 (ii) Anoda  
 (iii) Guava  
 (iv) Kenda

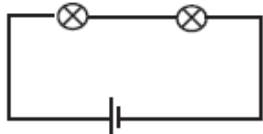


- (17) Which is the answer that contains only liquid matters.  
 (i) Water, Coconut oil (iii) Mercury, Nitrogen  
 (ii) Water, Steam (iv) Mercury, Steam

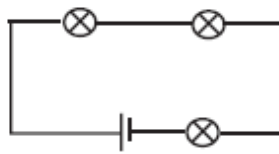
- (18) Which is the circuit that contains bulbs with maximum illumination.



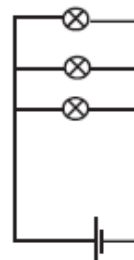
A



B



C



D

(19) The diagram shows.

- (i) A diode
- (ii) A light dependent resistor
- (iii) A light emitting diode
- (iv) A bulb



(20) The colour off phenolphthalein in a basic solution is,

- (i) Colour less
- (ii) Pink
- (iii) Red
- (iv) Yellow

### Part II

- Write answer for 5 questions Including first question.

(1) (A) These are some chemical reactions which were conducted in the school laboratory.

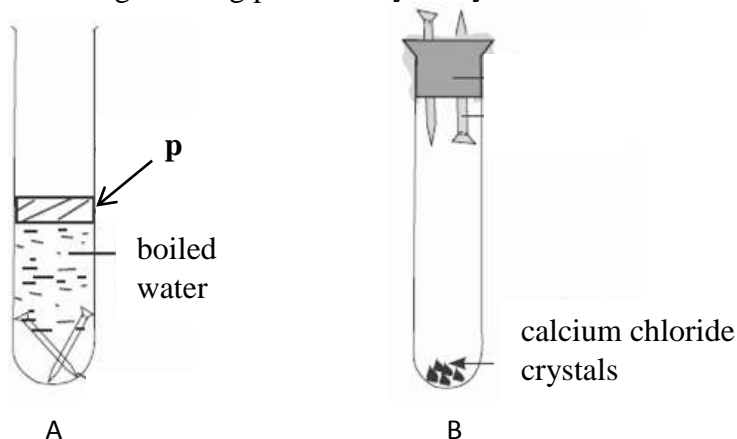
*a* – putting an iron nail into a copper sulphate solution.

*b* – Adding a zinc granule to hydrochloric acid.

*c* – burning a magnesium ribbon.

- (i) State two observations which you gained during each of the above reaction. (m. 3)
- (ii) Mention the products and reactants regarded to the experiment C. (m. 1)
- (iii) It is need to hold a magnesium ribbon to a flame for a few seconds to burn it. What is the reason for that? (m. 1)
- (iv) State another two factors essential for combustion. (m. 1)
- (v) Which products are formed only during incomplete combustion of fuels? (m. 1)
- (vi) Name two physical changes taking place in day today life. (m. 1)

(B)

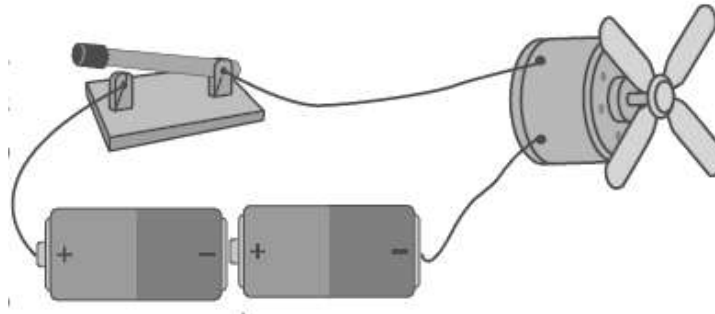


above diagram shows experiments related to rusting of iron.

- (i) What is rusting of iron? (m.1)
- (ii) State two factors needed for rusting of iron? (m.1)
- (iii) Name material P? (m.1)
- (iv) Name a substance which can be used instead of calcium chloride crystals. (m.1)

- (v) Why is calcium chloride used? (m.1)
- (vi) Is milk of magnesia acidic or basic? (m.1)
- (vii) What is neutralization? (m.1)

(2) This is a diagram of an electric circuit.



- (i) What is an electric current? (m.1)
- (ii) Draw the circuit diagram using symbols. (m.1)
- (iii) State the direction of flowing electric current. Represent it on the diagram. (m.1)
- (iv) Mention the observation that gained when the terminals of the cells are changed. (m.1)
- (v) Which equipment is used to measure potential difference? (m.1)
- (vi) How to connect the above mentioned equipment to a circuit? (m.1)
- (vii) What is a resistor? (m.1)
- (viii) State the unit of measuring resistance. (m.1)
- (ix) Which change is occurred in the above circuit when a resistor is connected? (m.1)

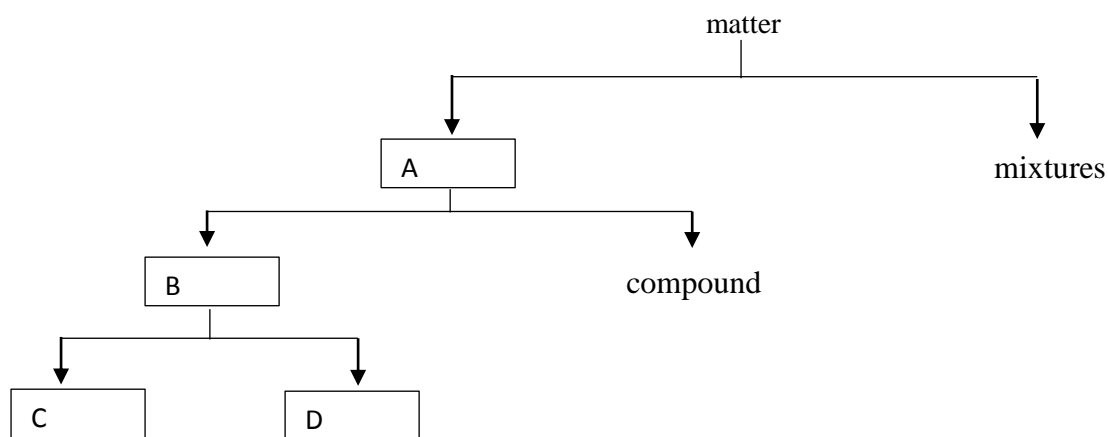
(3) The main function of leaf is photosynthesis.

- (i) Name the materials needed for photosynthesis. (m.1)
- (ii) State an adaptation for efficient photosynthesis of leaves. (m.1)
- (iii) What is leaf arrangement? (m.1)
- (iv) State another 2 functions of stems in addition to the basic function. (m.1)
- (v) Complete following table.

Type of root	Plants having that root.
storage root	
clasping root	
respiratory root	
aerial root	

- (vi) State 2 functions of underground stem. (m.1)
- (vii) Some plants have photosynthetic stem. Name 2 such plants. (m.1)
- (viii) State an adaptation of leaves of temple tree to reduce transpiration. (m.1)

(4) This is a flow chart related to matter.



(i) Name *A, B, C, D* related to above diagram. (m.1)

(ii) Select and write compounds among sulphur, mercury, water, glucose. (m.1)

(iii) What are the elements in the water? (m.1)

(iv) Write suitable physical property regarded each description.

1. Ability to hammered into sheets without breaking into pieces.
2. Ability to be drawn into a wire without breaking.
3. Ability to stretch up on pulling and returning to initial state when the force is released.

(m.3)

(v) Name the equipment used in the laboratory to measure the density of liquids. (m.1)

(vi) Draw a named diagram to show way of existing mercury and water in a test tube. (m.1)

(vii) water can be used to prepare coloured solution. Due to discontinuous nature of matter. What is discontinuous nature of a liquid? (m.1)

(5) (A) Various musical instruments produce sound in different ways.

(i) Group musical instruments based on the method of producing sound. Write an examples for each group. (m.3)

(ii) What is frequency? (m.1)

(iii) State a methods of changing the sound produced by musical instruments with strings. (m.1)

(iv) Mention a difference between music and noise. (m.1)

(B) There are various equipment's found in day to day life where magnets are used?

(i) Draw a diagram to illustrate the arrangement of magnetic field lines around a bar magnet. (m.1)

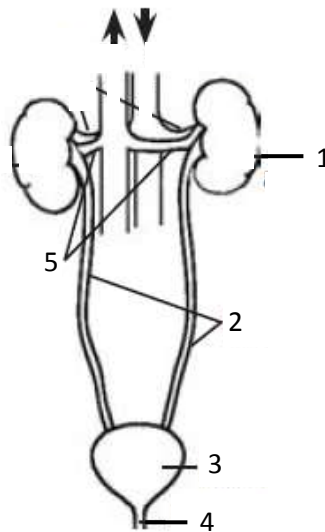
(ii) Describe the method of identifying poles of the magnet on which poles are not marked using only a magnet on which poles are marked. (m.1)

(iii) Which type of magnet is used in following instances. (m.1)

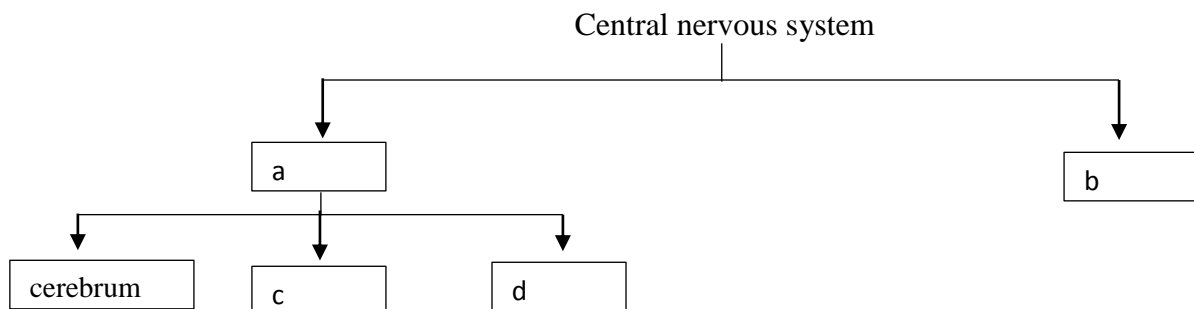
(a) Dynamo

(b) electric crane

- (6) (A) The biological processes that take place within the cells, produce different product that useful to the body as well as useless to the body.
- (i) What are excretory products? (m.1)
- (ii) Nimal said that “faeces is not an excretory products.”
- (a) Do you agree with Nimal’s idea? (m.2)
- (b) Explain reason for your answer. (m.1)
- (B) Following diagram shows a system n human body.



- (i) Name the parts 1, 2, 3, 4, 5 (m.5)
- (ii) Mention 2 components which contained in urine except water. (m.1)
- (iii) Name *a, b, c, d* in the following diagram. (m.2)



- (7) (A) There are living organisms which are visible and also invisible to naked eye in our environment.
- (i) Define the term micro-organisms. (m.1)
- (ii) State two examples for micro-organisms. (m.1)
- (iii) Who observed micro-organisms for the very first time? (m.1)
- (iv) What is food spoilage? (m.1)
- (v) Write 2 changes which occurred in food, when they are spoiled. (m.2)
- (B) Animals can be classified into two groups.
- (i) Which criteria is used to classify animals. (m.1)
- (ii) Mention the relevant group of animals. Which suitable for following features. (m.2)
- (a) having worm like body shape
- (b) there are two forms as polyp and medusa.
- (c) dry skin without glands
- (d) possess stream lined body shape and has gills.
- (iii) Name two organisms who posses the feature mentioned in C. (m.1)